

# **STEP-BY-STEP**

**2nd Ed.**

## **A GUIDE TO MOBILITY TECHNIQUES**

### **REVIEW GUIDE**

## **NON-CANE TECHNIQUES**

**By Sandra Rosen, Ph.D.**

# **ACKNOWLEDGEMENTS**

## **Text and Materials Development**

Sandra Rosen

### **Project Leaders**

Terrie (Mary T.) Terlau

Rosanne Hoffmann

### **Research Assistant**

Lara Kirwan

## **Graphics and Photography**

Sandra Rosen

Terri Gilmore

Bisig Impact Group

### **Production Team**

Lila Adkins

Cary Crumpton

Darlene Donhoff

Anna Fox

Frank Hayden

David Hines

Karen Marshall

Lou Tingle

Phyllis Williams

### **Expert Reviewers**

Nora Griffin-Shirley

Julie Hapeman

Donna Brostek Lee

Richard Long

Grace Ambrose Zaken

# TABLE OF CONTENTS

Acknowledgements .....	2
Introduction .....	4
Self-Protective .....	5
Lower Hand & Forearm .....	6
Upper Hand & Forearm .....	7
Directional.....	10
Trailing .....	11
Direction-Taking (Tactile).....	15
Traversing Open Spaces.....	17

# INTRODUCTION

The review guides supplement the Step-By-Step series on orientation & mobility. Designed for use by students preparing to become O&M specialists and by other vision professionals alike, the review guides provide the user with a quick, sequential, and pictorial review of the mobility skills taught in the corresponding study guide and video. Whether used to prepare for a test or to provide a quick refresher when preparing to teach a new or forgotten skill, it is hoped this review guide will be of value to the user. For more detailed information about each mobility skill, please see the Step-By-Step study guides or the Step-By-Step videos included on the flash drive.

## **Notes for Screen Reader Users:**

The format used for the review guides is a series of tables with descriptive headings immediately preceding each one. In lieu of Alt Text, a short description of each photo appears in the cell to the left of that photo.

# **SELF-PROTECTIVE**

# LOWER HAND & FOREARM

## Standard

As she walks, the traveler positions her body as follows:

- **Trunk**
  - Straight forward
- **Elbow**
  - Straight, but neither hyperextended nor locked



Front View

- **Hand and Wrist**
  - At midline, 6–8 inches in front of her body; the wrist is bent slightly downward and her palm faces her body. The fingers point downward and are held relaxed and close together.



Side View

# UPPER HAND & FOREARM

## Standard

As she walks, the traveler positions her body as follows:

- **Trunk**
  - Facing straight forward
- **Upper arm**
  - Parallel to the floor at shoulder height (the shoulders are relaxed)
- **Elbow**
  - Bent to 120 degrees
- **Wrist**
  - Straight
- **Hand**

Her palm faces forward; her fingers are together and her hand is cupped slightly.
- **Forearm**
  - Across her body with her fingers reaching 1 inch beyond her opposite shoulder (often most easily verified from a rear view)



Front View



Side View



Rear View

When following a wall, the traveler performs this technique with her arm that is farthest from the wall.





## Modified

As she walks, the traveler positions her body as follows:

- **Trunk**
  - Facing straight forward
- **Elbow**
  - Slightly ahead of her body
- **Wrist**
  - Straight
- **Hand**
  - One foot in front of her face; palm faces forward. Fingers point upward and are held relaxed and close together.



Front View



Side View

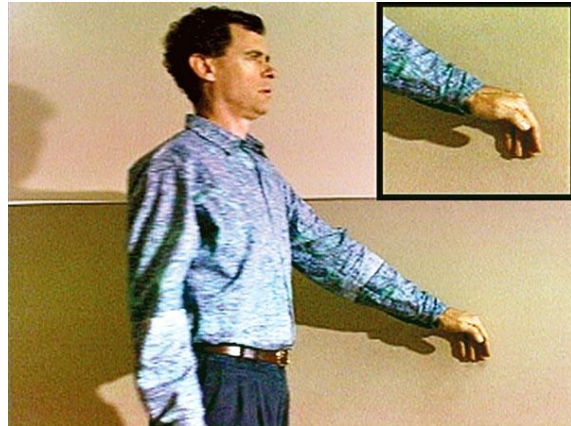
# **DIRECTIONAL**

# TRAILING

The traveler walks 4–6 inches from the vertical surface being followed. He holds his arm forward at a 45-degree angle with his elbow straight.

## With the Ring and Little Finger

As he walks, the traveler contacts the surface lightly with the backs of his ring finger and little finger; his thumb and fingers point downward.



## With All Four Fingers

As he walks, the traveler contacts the surface lightly with the backs of all four of his fingers; his thumb and fingers point downward.



## With the Side of the Hand

As he walks, the traveler contacts the surface lightly with the side of his hand. He holds his wrist bent so that the back of his hand faces forward. His hand is relaxed with his fingers cupped slightly and pointing downward; his thumb points downward.



## With the Fingernails

As he walks, the traveler contacts the surface lightly with the back of his fingernails; his fingers are curled into a loose fist and his thumb points downward.



# DIRECTION-TAKING (TACTILE)

## Perpendicular Alignment

The traveler stands with her back to a flat surface that runs perpendicular to her desired line of travel.

- To help verify this alignment, the traveler can place two symmetrical body parts against the surface. She then aligns the remaining body parts facing forward.



Using the appropriate cane and/or protective technique(s), the traveler projects a straight line of travel and walks forward.





## Parallel Alignment

The traveler stands about 4–6 inches from a flat surface that runs parallel to her desired line of travel. Her entire body (head, trunk, feet) face forward.



The traveler slides her arm forward along the surface to verify her alignment. (A white double-headed arrow in the photo indicates the movement of the traveler's arm.)



The traveler projects a straight line of travel and walks forward.





# TRAVERSING OPEN SPACES

## Upper Hand & Forearm

Upon locating the opening with his trailing hand, the traveler maintains contact with the wall and walks up to the opening. He pauses and listens for people who might be passing through the opening.



When it is clear, the traveler drops his trailing arm to his side and assumes the UPPER HAND & FOREARM position with his other arm.



The traveler crosses the opening. He locates the continuation of the trailing surface (e.g., the wall) on the opposite side of the opening and resumes travel.



## Extended Arm

Upon locating the opening with his trailing hand, the traveler maintains contact with the wall and walks up to the opening. He pauses and listens for people who might be passing through the opening.



When it is clear, the traveler reaches his trailing arm forward and resumes the TRAILING position.



The traveler projects a straight line of travel forward. He crosses the opening, locating the wall on the opposite side, and then resumes travel.



## Rotating Trunk

Upon locating the opening with his trailing hand, the traveler maintains contact with the wall and walks up to the opening. He pauses and listens for people who might be passing through the opening.



When it is clear, the traveler drops his trailing arm to his side and assumes the UPPER HAND & FOREARM position.



The traveler rotates his trunk (not his entire body) toward the opening.



The traveler crosses the opening. He locates the continuation of the trailing surface (e.g., the wall) on the opposite side of the opening and resumes travel.





## Squaring-Off

Upon locating the opening with his trailing hand, the traveler maintains contact with the wall and walks up to the opening. He pauses and listens for people who might be passing through the opening.



When it is clear, the traveler turns the corner and takes one step. He then places his back against the wall.



After listening to verify that it is still clear, the traveler projects a straight line of travel forward and walks across the opening to the opposite side using the UPPER HAND & FOREARM technique.



Upon contacting the wall on the other side, the traveler turns and trails the wall to the corner.



He then pauses and listens for intersecting pedestrian traffic. When it is clear, he turns the corner and resumes travel.



## Passing Crowded Doorways

Upon encountering a crowded doorway, the traveler pauses and listens for people passing through the opening and in his projected travel path around the doorway.



When it is clear, the traveler assumes the UPPER HAND & FOREARM position with the arm that is opposite the wall.

He moves in a semi-circle across the estimated width of the doorway and...



...locates the wall on the opposite side.



American Printing House for the Blind, Inc.  
1839 Frankfort Avenue  
P.O. Box 6085  
Louisville, Kentucky 40206-0085  
Phone: 502-895-2405  
Toll Free: 800-223-1839  
Fax: 502-899-2274  
Email: [info@aph.org](mailto:info@aph.org)  
Website: [www.aph.org](http://www.aph.org)

**Step-By-Step, 2nd Ed.**  
**REVIEW GUIDE**  
**Non-Cane Techniques**

Copyright © 2021

Catalog Number 8-75981-00